



March 12, 2010

Co-Chair Edward Meyer
Co-Chair Richard Roy
Senator John McKinney
Representative Clark Chapin

Members of Environment Committee:

RE: Senate Bill 382, An Act Supporting Biodiesel Blended Heating Oil and Lowering the Sulfur Content of Heating Oil in the State.

My name is **Jamie Lohr**. I am the owner and President of Guardian Fuel & Energy Systems, Inc. of Stonington, Connecticut and Westerly, Rhode Island. **Established in 1993, we retail and wholesale heating and transportation fuels.** I am a 31 year resident of the State of Connecticut, and reside today in Stonington, CT.

I come to support Senate Bill 382, An Act Supporting Biodiesel Blended Heating Oil and Lowering the Sulfur Content of Heating Oil in the State.

Guardian Fuel & Energy Systems - Biodiesel Product Experience

In **2006** we began using **BioHeat®** in our own home, and introduced it to our heating oil customers. Initial interest was minimal, since most people had never heard of biodiesel. We began an education process that continues today.

We had come to know of soy-based biodiesel several years before, and had spent a great deal of time and energy learning how it's made, **feedstocks**, its **properties**, how to **handle and store** it, how to **blend** it, the importance of **ASTM** specifications, and how biodiesel **could be introduced into heating oil for the purpose of creating a better, blended fuel.** **Blending the higher Btu petroleum product with cleaner burning biodiesel, in fact results in a fuel that is better than either of its components alone.**

Specifically, Guardian Fuel was interested in a fuel that was made from **renewable resources, with reduced emissions.** Blending biodiesel with 3000ppm sulfur heating oil and with 15ppm sulfur diesel fuel (ULSD), we also get **additional benefits:**

- health benefits** (reduced particulate matter)
- cleaning properties** (tanks, burners)
- improved system operation** (better combustion, cleaner burners, no soot)
- reduced foreign oil consumption** (small steps)

**support for American farmers /crops
creation of green New England manufacturing jobs**

Today, about 30% of our heating customers choose BioHeat®, (a blend of **95 % high sulfur heating oil** and **5% ASTM certified biodiesel**). **No modifications or investment** in their heating equipment was required; this is a "drop-in fuel". We have taken **no special precautions** other than to watch carefully in 2006. We have had **no service issues** of any kind. No tank issues, no filter issues, no burner issues. Nothing but cleaner burners, absence of carbon, and absence of 'black mayonnaise.' Our BioHeat® customers have **collectively saved over 148,600 pounds of CO2 and sulfur** from their emissions.

To gain additional experience (in short order) **with biodiesel blends**, we operate our fleet of International fuel delivery trucks (model years 1989, 1993, 1997, 2006, 2007) and one Jeep Grand Cherokee (2007) on BioDiesel™ (a blend of **15ppm ULSD and ASTM biodiesel** at 5%, 10%, 15%, and 20% blends) starting in 2006. We made no engine or exhaust modifications. We took no special precautions. We have had no service issues of any kind. We have **saved approximately 38,300 pounds of CO2 and sulfur** from our exhaust.

Our customer; Haley Brook Market in Old Mystic, CT began selling BioDiesel™ (a blend of **95 % 15ppm ULSD and 5 % ASTM biodiesel**) at their pumps in April, 2009. There have been no reported problems. Haley Brook has **saved approximately 65,900 pounds of CO2 and sulfur** from their customers' tailpipes, while increasing their 'diesel' sales (from the same period the year before) by an astonishing 27%.

Heating Oil Industry Supports Efforts to Improve Emissions

In September, North Atlantic heating oil industry leaders met to adopt standards for change. The changes proposed are a reduction in sulfur content of heating oil, and to include biodiesel as a component of heating oil. Both of these changes will bring cleaner air in reduced emissions of greenhouse gases and particulate matter, from heating oil. These proposed changes represent more steps in the continued, decades-long process of the heating oil industry to develop **more efficient heating systems; to use less fuel, and in improving the fuel itself; for the benefit of the consumers who use heating oil, and for every citizen, in the very air we breathe.**

Finally, I understand that language regarding **BQ9000** certification of producers and marketers **will be removed from SB 382** (will not be a requirement) and therefore won't comment except that I completely **support this omission.**

I support the proposed Senate Bill 382 , and ask that you do the same.

Thank you.

Jamie K.W. Lohr, President
Guardian Fuel & Energy Systems, Inc